

## WHAT IS CLAIMED IS:

1. An isolated soluble complex comprising at least 6 amino acids of the mature protein portion of SEQ ID NO:  
5 2 or 4, and:
  - a) at least 6 amino acids of the mature protein portion of SEQ ID NO: 12 or 13; or
  - b) at least 6 amino acids of the mature protein portion of the CNTF-R.
- 10 2. The complex of Claim 1, wherein said complex:
  - a) comprises a recombinant polypeptide of mature SEQ ID NO: 2 or 4;
  - 15 b) comprises a recombinant polypeptide of mature SEQ ID NO: 12 or 13;
  - c) comprises a recombinant polypeptide of mature CNTF-R;
  - d) comprises both a recombinant polypeptide of mature SEQ ID NO: 2 or 4, and a recombinant polypeptide of mature SEQ ID NO: 12 or 13;
  - 20 e) comprises both a recombinant polypeptide of mature SEQ ID NO: 2 or 4, and a recombinant polypeptide of mature CNTF-R;
  - f) is detectably labeled;
  - 25 g) is in a buffered solution; or
  - h) is in a sterile solution.
3. The complex of Claim 1, which:
  - a) comprises a mature IL-B60 polypeptide;
  - 30 b) comprises a mature CLF-1 polypeptide;
  - c) comprises a mature CNTF-R polypeptide;
  - d) exhibits at least four nonoverlapping segments of at least seven amino acids of SEQ ID NO: 2 or 4;
  - e) exhibits epitopes from both primate L-B60 and  
35 primate CLF-1;

- f) exhibits epitopes from both primate L-B60 and primate CNTF-R;
  - g) is not glycosylated;
  - h) is attached to a solid substrate;
  - 5 i) is conjugated to another chemical moiety; or
  - j) comprises a detection or purification tag, including a FLAG, His6, or Ig sequence.
4. A kit comprising said complex of Claim 1, and:
- 10 a) a compartment comprising said complex; or
  - b) instructions for use or disposal of reagents in said kit.
5. An isolated or recombinant polypeptide
- 15 comprising:
- a) a first segment comprising at least seven amino acids identical to segments of SEQ ID NO: 2 or 4, and a second segment comprising at least seven amino acids identical to segments of mature SEQ ID NO: 12 or 13;
  - 20 b) at least two distinct nonoverlapping segments of at least five amino acids identical to segments of mature SEQ ID NO: 2 or 4, and a third segment comprising at least seven amino acids identical to segments of mature SEQ ID NO: 12 or 13;
  - 25 c) at least one segment comprising at least seven amino acids identical to segments of mature SEQ ID NO: 2 or 4, and two distinct nonoverlapping segments of at least five amino acids identical to segments of mature SEQ ID NO: 12 or 13;
  - 30 d) a first segment comprising at least seven amino acids identical to segments of SEQ ID NO: 2 or 4, and a second segment comprising at least seven amino acids identical to segments of mature primate CNTF-R;
  - 35

- 5 e) at least two distinct nonoverlapping segments of  
at least five amino acids identical to segments  
of mature SEQ ID NO: 2 or 4, and a third segment  
comprising at least seven amino acids identical  
to segments of mature primate CNTF-R; or
- 10 f) at least one segment comprising at least seven  
amino acids identical to segments of mature SEQ  
ID NO: 2 or 4, and two distinct nonoverlapping  
segments of at least five amino acids identical  
to segments of mature primate CNTF-R.

6. The polypeptide of Claim 5, wherein said  
distinct nonoverlapping segments of identity:
- 15 a) include one of at least eight amino acids;  
b) include one of at least five amino acids and a  
second of at least six amino acids;  
c) include at least three segments of at least four,  
five, and six amino acids, or  
d) include one of at least twelve amino acids.

- 20 7. The polypeptide of Claim 5, which:
- a) comprises a mature IL-B60 sequence;  
b) comprises a mature CLF-1 sequence;  
c) comprises a mature CNTF-R sequence;
- 25 d) exhibits at least four nonoverlapping segments of  
at least seven amino acids of SEQ ID NO: 2 or 4;  
e) has a length at least about 30 amino acids;  
f) exhibits epitopes from both primate IL-B60 and  
primate CLF-1;
- 30 g) exhibits epitopes from both primate IL-B60 and  
primate CNTF-R;  
h) is not glycosylated;  
i) has a molecular weight of at least 30 kD;  
j) is a synthetic polypeptide;
- 35 k) is attached to a solid substrate;  
l) is conjugated to another chemical moiety; or

- m) comprises a detection or purification tag, including a FLAG, His6, or Ig sequence.

8. A composition comprising:

- 5 a) substantially pure combination of IL-B60 and CLF-1;
- b) substantially pure combination of IL-B60 and CNTF-R;
- c) a sterile polypeptide of Claim 5; or
- 10 d) said polypeptide of Claim 5 and a carrier, wherein said carrier is:
  - i) an aqueous compound, including water, saline, and/or buffer; and/or
  - 15 ii) formulated for oral, rectal, nasal, topical, or parenteral administration.

9. A kit comprising a polypeptide of Claim 5, and:

- a) a compartment comprising said polypeptide; or
- 20 b) instructions for use or disposal of reagents in said kit.

10. A method:

- 25 a) of making an antibody which recognizes a complex of Claim 1, comprising inducing an immune response in an animal with said complex;
- b) of immunoselecting antibodies, comprising contacting a population of antibodies to a complex of Claim 1, and separating antibodies that bind from those which do not bind; or
- 30 c) of formulating a composition, comprising admixing a complex of Claim 1 with a carrier.

11. A binding compound comprising an antigen binding site from an antibody, which antibody specifically binds
- 35 said complex of Claim 2d or 2e, but not to any of said mature polypeptides of SEQ ID NO: 2, 4, 12, 13, or CNTF-R.

12. The binding compound of Claim 11, wherein:
- a) said binding compound is:
    - i) in a container;
    - 5 ii) an Fv, Fab, or Fab2 fragment; or
    - iii) conjugated to another chemical moiety; or
  - b) said antibody:
    - i) is raised against a substantially pure complex of IL-B60 with CLF-1;
    - 10 ii) is raised against a substantially pure complex of IL-B60 with CNTF-R;
    - iii) is immunoselected;
    - iv) is a polyclonal antibody;
    - v) exhibits a Kd to antigen of at least 30  $\mu$ M;
    - 15 vi) is attached to a solid substrate, including a bead or plastic membrane;
    - vii) is in a sterile composition; or
    - viii) is detectably labeled, including a radioactive or fluorescent label.
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13. A composition comprising:
- a) a sterile binding compound of Claim 12, or
  - b) said binding compound of Claim 12 and a carrier, wherein said carrier is:
    - 25 i) an aqueous compound, including water, saline, and/or buffer; and/or
    - ii) formulated for oral, rectal, nasal, topical, or parenteral administration.
- 30
14. A kit comprising said binding compound of Claim 11, and:
- a) a compartment comprising said binding compound; or
  - b) instructions for use or disposal of reagents in
  - 35 said kit.

15. A method of producing an antigen:antibody complex, comprising contacting under appropriate conditions a primate complex comprising:
- a) IL-B60 and CLF-1 polypeptides; or
  - 5 b) IL-B60 and CNTF-R polypeptides;
- with an antibody of Claim 11, thereby allowing said complex to form.
16. The method of Claim 15, wherein:
- 10 a) said complex is purified from other cytokines;
  - b) said complex is purified from other antibody;
  - c) said contacting is with a sample comprising a cytokine;
  - d) said contacting allows quantitative detection of
  - 15 said antigen;
  - e) said contacting is with a sample comprising said antibody; or
  - f) said contacting allows quantitative detection of said antibody.
- 20
17. An isolated or recombinant nucleic acid:
- a) encoding said amino acid portions of Claim 5;
  - b) encoding said amino acid portions of Claim 5, and
  - 25 comprise a segment at least 30 contiguous nucleotides from SEQ ID NO: 1 or 3;
  - c) which will coexpress a segment of at least seven contiguous amino acids from SEQ ID NO: 2 or 4, and a segment of at least seven contiguous amino acids from SEQ ID NO: 12 or 13; or
  - 30 d) which will coexpress a segment of at least seven contiguous amino acids from SEQ ID NO: 2 or 4, and a segment of at least seven contiguous amino acids from CNTF-R.
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18. The nucleic acid of Claim 17, which:
- a) encodes IL-B60 from a human;

- b) encodes CLF-1 from a human;
  - c) encodes CNTF-R from a human;
  - d) is an expression vector;
  - e) further comprises an origin of replication;
  - 5 f) comprises a detectable label;
  - g) comprises synthetic nucleotide sequence; or
  - h) is less than 6 kb, preferably less than 3 kb.
19. A cell comprising said recombinant nucleic acid  
10 of Claim 18.
20. The cell of Claim 19, wherein said cell is:
- a) a prokaryotic cell;
  - b) a eukaryotic cell;
  - 15 c) a bacterial cell;
  - d) a yeast cell;
  - e) an insect cell;
  - f) a mammalian cell;
  - g) a mouse cell;
  - 20 h) a primate cell; or
  - i) a human cell.
21. A kit comprising said nucleic acid of Claim 18,  
and:
- 25 a) a compartment comprising said nucleic acid;
  - b) a compartment further comprising a primate IL-  
B60 polypeptide;
  - c) a compartment further comprising a primate CLF-1  
polypeptide;
  - 30 d) a compartment further comprising a primate CNTF-  
R polypeptide; or
  - e) instructions for use or disposal of reagents in  
said kit.

22. A method:

- 5 a) of making a duplex nucleic acid, comprising contacting a nucleic acid of Claim 17 with a complementary nucleic acid under appropriate conditions, thereby forming said duplex;
- b) of expressing a polypeptide, comprising expressing said nucleic acid of Claim 17, thereby producing said polypeptide; or
- 10 c) of transfecting a cell, comprising contacting said cell under appropriate conditions with said nucleic acid of Claim 17.

23. An isolated or recombinant nucleic acid which encodes at least 5 contiguous amino acids of SEQ ID NO: 12, 13, or primate CNTF-R and:

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- a) hybridizes under wash conditions of 30 minutes at 30° C and less than 2M salt to the coding portion of SEQ ID NO: 1; or
- b) exhibits identity over a stretch of at least about 30 nucleotides to a primate IL-B60.
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24. The isolated nucleic acid of Claim 23, wherein:

- a) said contiguous amino acids number at least 8;
- b) said wash conditions are at 45° C and/or 500 mM salt; or
- 25 c) said stretch is at least 55 nucleotides.

25. The recombinant nucleic acid of Claim 23, wherein:

- 30 a) said contiguous amino acids number at least 12;
- b) said wash conditions are at 55° C and/or 150 mM salt; or
- c) said stretch is at least 75 nucleotides.

35 26. A method of modulating physiology or development of a cell or tissue culture cells comprising contacting



said cell with an agonist or antagonist of a complex comprising mammalian IL-B60 and:

- a) CLF-1; or
- b) CNTF-R.

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27. A method of:

- a) producing a complex of Claim 1, comprising coexpressing a recombinant IL-B60 with a recombinant CLF-1 or CNTF-R;
- 10 b) increasing the secretion of an IL-B60 polypeptide comprising expressing said polypeptide with CLF-1; or
- c) increasing the secretion of a CLF-1 polypeptide, comprising expressing said CLF-1 with an IL-B60.

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28. The method of Claim 27, wherein:

- a) said increasing is at least 3 fold; or
- b) said expressing is of a recombinant nucleic acid encoding one or both of said polypeptide and
- 20 CLF-1.

29. A method of screening for a receptor which binds said complex of Claim 1, comprising contacting said complex to a cell expressing said receptor under

25 conditions allowing said complex to bind to said receptor, thereby forming a detectable interaction.

30. The method of Claim 29, wherein said interaction results in a physiological response in said cell.

## SEQUENCE LISTING

5 SEQ ID NO: 1 is a primate IL-B60 natural nucleic acid sequence.  
 SEQ ID NO: 2 is a primate IL-B60 natural amino acid sequence.  
 SEQ ID NO: 3 is a rodent IL-B60 natural nucleic acid sequence.  
 SEQ ID NO: 4 is a rodent IL-B60 natural amino acid sequence.  
 SEQ ID NO: 5 is a rodent LIF.  
 SEQ ID NO: 6 is a primate LIF.  
 10 SEQ ID NO: 7 is a primate CT-1.  
 SEQ ID NO: 8 is a rodent CT-1.  
 SEQ ID NO: 9 is a primate CNTF.  
 SEQ ID NO: 10 is a rodent CNTF.  
 SEQ ID NO: 11 is a primate DNAX IL-40.  
 15 SEQ ID NO: 12 is a primate CLF-1.  
 SEQ ID NO: 13 is a rodent CLF-1.

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 Met Ser Arg Arg Glu Gly Ser Leu Glu Asp Pro Gln Thr Asp Ser Ser  
 1 5 10 15  
 55 Val Ser Leu Leu Pro His Leu Glu Ala Lys Ile Arg Gln Thr His Ser  
 20 25 30  
 60 Leu Ala His Leu Leu Thr Lys Tyr Ala Glu Gln Leu Leu Gln Glu Tyr  
 35 40 45



Val Gln Leu Gln Gly Asp Pro Phe Gly Leu Pro Ser Phe Ser Pro Pro  
 50 55 60  
 5 Arg Leu Pro Val Ala Gly Leu Ser Ala Pro Ala Pro Ser His Ala Gly  
 65 70 75 80  
 Leu Pro Val His Glu Arg Leu Arg Leu Asp Ala Ala Ala Leu Ala Ala  
 85 90 95  
 10 Leu Pro Pro Leu Leu Asp Ala Val Cys Arg Arg Gln Ala Glu Leu Asn  
 100 105 110  
 Pro Arg Ala Pro Arg Leu Leu Arg Arg Leu Glu Asp Ala Ala Arg Gln  
 115 120 125  
 Ala Arg Ala Leu Gly Ala Ala Val Glu Ala Leu Leu Ala Ala Leu Gly  
 130 135 140  
 20 Ala Ala Asn Arg Gly Pro Arg Ala Glu Pro Pro Ala Ala Thr Ala Ser  
 145 150 155 160  
 Ala Ala Ser Ala Thr Gly Val Phe Pro Ala Lys Val Leu Gly Leu Arg  
 165 170 175  
 25 Val Cys Gly Leu Tyr Arg Glu Trp Leu Ser Arg Thr Glu Gly Asp Leu  
 180 185 190  
 Gly Gln Leu Leu Pro Gly Gly Ser Ala  
 195 200  
 30  
 <210> 8  
 <211> 203  
 35 <212> PRT  
 <213> rodent  
 <400> 8  
 40 Met Ser Gln Arg Glu Gly Ser Leu Glu Asp His Gln Thr Asp Ser Ser  
 1 5 10 15  
 Ile Ser Phe Leu Pro His Leu Glu Ala Lys Ile Arg Gln Thr His Asn  
 20 25 30  
 45 Leu Ala Arg Leu Leu Thr Lys Tyr Ala Glu Gln Leu Leu Glu Glu Tyr  
 35 40 45  
 Val Gln Gln Gln Gly Glu Pro Phe Gly Leu Pro Gly Phe Ser Pro Pro  
 50 55 60  
 Arg Leu Pro Leu Ala Gly Leu Ser Gly Pro Ala Pro Ser His Ala Gly  
 65 70 75 80  
 55 Leu Pro Val Ser Glu Arg Leu Arg Gln Asp Ala Ala Ala Leu Ser Val  
 85 90 95  
 Leu Pro Ala Leu Leu Asp Ala Val Arg Arg Arg Gln Ala Glu Leu Asn  
 100 105 110

Pro Arg Ala Pro Arg Leu Leu Arg Ser Leu Glu Asp Ala Ala Arg Gln  
 115 120 125  
 5 Val Arg Ala Leu Gly Ala Ala Val Glu Thr Val Leu Ala Ala Leu Gly  
 130 135 140  
 Ala Ala Ala Arg Gly Pro Gly Pro Glu Pro Val Thr Val Ala Thr Leu  
 145 150 155 160  
 10 Phe Thr Ala Asn Ser Thr Ala Gly Ile Phe Ser Ala Lys Val Leu Gly  
 165 170 175  
 Phe His Val Cys Gly Leu Tyr Gly Glu Trp Val Ser Arg Thr Glu Gly  
 180 185 190  
 15 Asp Leu Gly Gln Leu Val Pro Gly Gly Val Ala  
 195 200  
 20 <210> 9  
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 <213> primate  
 25 <400> 9  
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 30 Cys Ser Arg Ser Ile Trp Leu Ala Arg Lys Ile Arg Ser Asp Leu Thr  
 20 25 30  
 Ala Leu Thr Glu Ser Tyr Val Lys His Gln Gly Leu Asn Lys Asn Ile  
 35 40 45  
 35 Asn Leu Asp Ser Ala Asp Gly Met Pro Val Ala Ser Thr Asp Gln Trp  
 50 55 60  
 Ser Glu Leu Thr Glu Ala Glu Arg Leu Gln Glu Asn Leu Gln Ala Tyr  
 65 70 75 80  
 40 Arg Thr Phe His Val Leu Leu Ala Arg Leu Leu Glu Asp Gln Gln Val  
 85 90 95  
 45 His Phe Thr Pro Thr Glu Gly Asp Phe His Gln Ala Ile His Thr Leu  
 100 105 110  
 Leu Leu Gln Val Ala Ala Phe Ala Tyr Gln Ile Glu Glu Leu Met Ile  
 115 120 125  
 50 Leu Leu Glu Tyr Lys Ile Pro Arg Asn Glu Ala Asp Gly Met Pro Ile  
 130 135 140  
 Asn Val Gly Asp Gly Gly Leu Phe Glu Lys Lys Leu Trp Gly Leu Lys  
 145 150 155 160  
 55 Val Leu Gln Glu Leu Ser Gln Trp Thr Val Arg Ser Ile His Asp Leu  
 165 170 175  
 60 Arg Phe Ile Ser Ser His Gln Thr Gly Ile Pro Ala Arg Gly Ser His  
 180 185 190

Tyr Ile Ala Asn Asn Lys Lys Met  
           195                    200

5  
 <210> 10  
 <211> 198  
 <212> PRT  
 <213> rodent

10  
 <400> 10  
 Met Ala Phe Ala Glu Gln Ser Pro Leu Thr Leu His Arg Arg Asp Leu  
       1                    5                    10                    15

15 Cys Ser Arg Ser Ile Trp Leu Ala Arg Lys Ile Arg Ser Asp Leu Thr  
                     20                    25                    30

Ala Leu Met Glu Ser Tyr Val Lys His Gln Gly Leu Asn Lys Asn Ile  
                     35                    40                    45

20 Ser Leu Asp Ser Val Asp Gly Val Pro Val Ala Ser Thr Asp Arg Trp  
       50                    55                    60

25 Ser Glu Met Thr Glu Ala Glu Arg Leu Gln Glu Asn Leu Gln Ala Tyr  
       65                    70                    75                    80

Arg Thr Phe Gln Gly Met Leu Thr Lys Leu Leu Glu Asp Gln Arg Val  
                     85                    90                    95

30 His Phe Thr Pro Thr Glu Gly Asp Phe His Gln Ala Ile His Thr Leu  
                     100                    105                    110

Thr Leu Gln Val Ser Ala Phe Ala Tyr Gln Leu Glu Glu Leu Met Ala  
                     115                    120                    125

35 Leu Leu Glu Gln Lys Val Pro Glu Lys Glu Ala Asp Gly Met Pro Val  
       130                    135                    140

40 Thr Ile Gly Asp Gly Gly Leu Phe Glu Lys Lys Leu Trp Gly Leu Lys  
       145                    150                    155                    160

Val Leu Gln Glu Leu Ser Gln Trp Thr Val Arg Ser Ile His Asp Leu  
                     165                    170                    175

45 Arg Val Ile Ser Ser His His Met Gly Ile Ser Ala His Glu Ser His  
                     180                    185                    190

Tyr Gly Ala Lys Gln Met  
           195

50  
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 <212> PRT  
 <213> primate

<400> 11  
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60

Gln Gln Leu Pro Glu Thr Gln Gln Val Thr Thr Pro Gly Lys Lys Pro  
                     20                    25                    30  
 5 Val Ser Val Gly Arg Arg Glu Val Arg Val Pro Gly Thr Ala Leu Val  
                     35                    40                    45  
 Pro Ser Leu Leu Ser Val Ser Val Leu Leu Gln Leu Gln Tyr Gln Gly  
                     50                    55                    60  
 10 Ser Pro Phe Ser Asp Pro Gly Phe Ser Ala Pro Glu Leu Gln Leu Ser  
                     65                    70                    75                    80  
 Ser Leu Pro Pro Ala Thr Ala Phe Phe Lys Thr Trp His Ala Leu Asp  
                     85                    90                    95  
 15 Asp Gly Glu Arg Leu Ser Leu Ala Gln Arg Ala Ile Asp Pro His Leu  
                     100                    105                    110  
 20 Gln Leu Val Glu Asp Asp Gln Ser Asp Leu Asn Pro Gly Ser Pro Ile  
                     115                    120                    125  
 Leu Pro Ala Gln Leu Gly Ala Ala Arg Leu Arg Ala Gln Gly Pro Leu  
                     130                    135                    140  
 25 Gly Asn Met Ala Ala Ile Met Thr Ala Leu Gly Leu Pro Ile Pro Pro  
                     145                    150                    155                    160  
 Glu Glu Asp Thr Pro Gly Leu Ala Ala Phe Gly Ala Ser Ala Phe Glu  
                     165                    170                    175  
 30 Arg Lys Cys Arg Gly Tyr Val Val Thr Arg Glu Tyr Gly His Trp Thr  
                     180                    185                    190  
 35 Asp Arg Ala Val Arg Asp Leu Ala Leu Leu Lys Ala Lys Tyr Ser Ala  
                     195                    200                    205  
 40  
     <210> 12  
     <211> 410  
     <212> PRT  
     <213> primate  
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     <400> 12  
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 50 Pro Pro Leu Leu Pro Leu Leu Leu Leu Leu Cys Val Leu Gly Ala Pro  
                     20                    25                    30  
 Arg Ala Gly Ser Gly Ala His Thr Ala Val Ile Ser Pro Gln Asp Pro  
                     35                    40                    45  
 55 Thr Leu Leu Ile Gly Ser Ser Leu Leu Ala Thr Cys Ser Val His Gly  
                     50                    55                    60  
 60 Asp Pro Pro Gly Ala Thr Ala Glu Gly Leu Tyr Trp Thr Leu Asn Gly  
                     65                    70                    75                    80

	Arg	Arg	Leu	Pro	Pro	Glu	Leu	Ser	Arg	Val	Leu	Asn	Ala	Ser	Thr	Leu	
					85					90					95		
5	Ala	Leu	Ala	Leu	Ala	Asn	Leu	Asn	Gly	Ser	Arg	Gln	Arg	Ser	Gly	Asp	
				100					105					110			
	Asn	Leu	Val	Cys	His	Ala	Arg	Asp	Gly	Ser	Ile	Leu	Ala	Gly	Ser	Cys	
			115					120					125				
10	Leu	Tyr	Val	Gly	Leu	Pro	Pro	Glu	Lys	Pro	Val	Asn	Ile	Ser	Cys	Trp	
	130						135					140					
	Ser	Lys	Asn	Met	Lys	Asp	Leu	Thr	Cys	Arg	Trp	Thr	Pro	Gly	Ala	His	
15	145					150					155					160	
	Gly	Glu	Thr	Phe	Leu	His	Thr	Asn	Tyr	Ser	Leu	Lys	Tyr	Lys	Leu	Arg	
				165						170					175		
20	Trp	Tyr	Gly	Gln	Asp	Asn	Thr	Cys	Glu	Glu	Tyr	His	Thr	Val	Gly	Pro	
				180					185					190			
	His	Ser	Cys	His	Ile	Pro	Lys	Asp	Leu	Ala	Leu	Phe	Thr	Pro	Tyr	Glu	
			195					200					205				
25	Ile	Trp	Val	Glu	Ala	Thr	Asn	Arg	Leu	Gly	Ser	Ala	Arg	Ser	Asp	Val	
	210						215					220					
	Leu	Thr	Leu	Asp	Ile	Leu	Asp	Val	Val	Thr	Thr	Asp	Pro	Pro	Pro	Asp	
30	225					230					235					240	
	Val	His	Val	Ser	Arg	Val	Gly	Gly	Leu	Glu	Asp	Gln	Leu	Ser	Val	Arg	
					245					250					255		
35	Trp	Val	Ser	Pro	Pro	Ala	Leu	Lys	Asp	Phe	Leu	Phe	Gln	Ala	Lys	Tyr	
				260					265					270			
	Gln	Ile	Arg	Tyr	Arg	Val	Glu	Asp	Ser	Val	Asp	Trp	Lys	Val	Val	Asp	
			275					280					285				
40	Asp	Val	Ser	Asn	Gln	Thr	Ser	Cys	Arg	Leu	Ala	Gly	Leu	Lys	Pro	Gly	
	290						295					300					
	Thr	Val	Tyr	Phe	Val	Gln	Val	Arg	Cys	Asn	Pro	Phe	Gly	Ile	Tyr	Gly	
45	305					310					315					320	
	Ser	Lys	Lys	Ala	Gly	Ile	Trp	Ser	Glu	Trp	Ser	His	Pro	Thr	Ala	Ala	
				325						330					335		
50	Ser	Thr	Pro	Arg	Ser	Glu	Arg	Pro	Gly	Pro	Gly	Gly	Gly	Ala	Cys	Glu	
				340					345					350			
	Pro	Arg	Gly	Gly	Glu	Pro	Ser	Ser	Gly	Pro	Val	Arg	Arg	Glu	Leu	Lys	
			355					360					365				
55	Gln	Phe	Leu	Gly	Trp	Leu	Lys	Lys	His	Ala	Tyr	Cys	Ser	Asn	Leu	Ser	
		370					375					380					
	Phe	Arg	Leu	Tyr	Asp	Gln	Trp	Arg	Ala	Trp	Met	Gln	Lys	Ser	His	Lys	
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Thr Arg Asn Gln Val Leu Pro Asp Lys Leu  
 405 410

5  
 <210> 13  
 <211> 407  
 <212> PRT  
 <213> rodent

10  
 <400> 13  
 Arg Pro Leu Ser Ser Leu Trp Ser Pro Leu Leu Leu Cys Val Leu Gly  
 1 5 10 15

15 Val Pro Arg Gly Gly Ser Gly Ala His Thr Ala Val Ile Ser Pro Gln  
 20 25 30

20 Asp Pro Thr Leu Leu Ile Gly Ser Ser Leu Gln Ala Thr Cys Ser Ile  
 35 40 45

His Gly Asp Thr Pro Gly Ala Thr Ala Glu Gly Leu Tyr Trp Thr Leu  
 50 55 60

25 Asn Gly Arg Arg Leu Pro Ser Leu Ser Arg Leu Leu Asn Thr Ser Thr  
 65 70 75 80

Leu Ala Leu Ala Leu Ala Asn Leu Asn Gly Ser Arg Gln Gln Ser Gly  
 85 90 95

30 Asp Asn Leu Val Cys His Ala Arg Asp Gly Ser Ile Leu Ala Gly Ser  
 100 105 110

Cys Leu Tyr Val Gly Leu Pro Pro Glu Lys Pro Phe Asn Ile Ser Cys  
 115 120 125

35 Trp Ser Arg Asn Met Lys Asp Leu Thr Cys Arg Trp Thr Pro Gly Ala  
 130 135 140

40 His Gly Glu Thr Phe Leu His Thr Asn Tyr Ser Leu Lys Tyr Lys Leu  
 145 150 155 160

Arg Trp Tyr Gly Gln Asp Asn Thr Cys Glu Glu Tyr His Thr Val Gly  
 165 170 175

45 Pro His Ser Cys His Ile Pro Lys Asp Leu Ala Leu Phe Thr Pro Tyr  
 180 185 190

Glu Ile Trp Val Glu Ala Thr Asn Arg Leu Gly Ser Ala Arg Ser Asp  
 195 200 205

50 Val Leu Thr Leu Asp Val Leu Asp Val Val Thr Thr Asp Pro Pro Pro  
 210 215 220

55 Asp Val His Val Ser Arg Val Gly Gly Leu Glu Asp Gln Leu Ser Val  
 225 230 235 240

Arg Trp Val Ser Pro Pro Ala Leu Lys Asp Phe Leu Phe Gln Ala Lys  
 245 250 255

[illegible]